pediatric pulmonology

Volume 9, 1990

George Polgar
Editor

Wiley-Liss, Inc.

© 1990 Wiley-Liss, Inc.
41 East 11th Street
New York, NY 10003

Contents

Volume 9 • Number 1 • 1990

1 **Perspectives**

Original Articles

2 Pulmonary Function Testing Prior to Extubation in Infants With Respiratory Distress Syndrome
Kathleen A. Veness-Meehan, Susan Richter, and Jonathan M. Davis

7 *Pseudomonas* Hyperimmune Globulin Passive Immunotherapy for Pulmonary Exacerbations in Cystic Fibrosis
John E. Van Wye, Michael S. Collins, Majorie Baylor, James E. Pennington, Yao-Pi Hsu, Vic Sampanvejsopa, and Richard B. Moss

19 Compliance, Alveolar-Arterial Oxygen Difference, and Oxygenation Index Changes in Patients Managed With Extracorporeal Membrane Oxygenation
D. Spencer Brudno, R. Frederick Boedy, and William P. Kanto, Jr.

24 Effects of Indoor Air Pollution on Lung Function of Primary School Children in Kuala Lumpur
B.H.O. Azizi and R.L. Henry

30 Estimation of Intrapleural Pressure in the Newborn
Dennis E. Mayock, Jon F. Watchko, Thomas A. Standaert, and David E. Woodrum

34 Pulmonary Function in Infancy and in Childhood Following Mechanical Ventilation in the Neonatal Period
F. Lebourges, G. Moriette, M. Boulé, M.F. Delaperche, J.P. Relier and C. Gaultier

41 An Unusual Case of Vascular Ring: The Right Aortic Arch With Mirror-Image Branching and Aneurysm of the Left Ductus Arteriosus
H. Arakawa, K. Tokuyama, H. Mochizuki, M. Shigeta, M. Tashiro, A. Morikawa, and T. Kuroume

44 Mask Ventilation in Congenital Central Alveolar Hypoventilation Syndrome
Dennis W. Nielson and Philip G. Black

46 Episodic Stridor in a Child Secondary to Vocal Cord Dysfunction
Marie-Martine Logvinoff, Kam Y. Lau, David B. Weinstein, and Phool Chandra

49 Respiratory Complications in Children With Spondyloepiphyseal Dysplasia Congenita
Cary O. Harding, Christopher G. Green, William H. Perloff, and Richard M. Pauli

Diagnostic Methods

55 Accurate, Noninvasive Quantitation of Expiratory Gas Leak From Uncuffed Infant Endotracheal Tubes
Alison Knauth and Stephen Baumgart

61 **Selected Abstracts**

63 **Correspondence**

65 **Book Review**

67 **Announcement**

69

72

80

86

91

96

109

119

121

125

131

132

135

136

Volume 9 • Number 2 • 1990

Editorial

69 Longitudinal Designs and Their Statistical Analysis in Pediatric Pulmonary Research
Ronald W. Helms

Original Articles

72 Dynamic Responses to Tube Breathing During the First 10 Days of Life
C.J. Upton, A.D. Milner, G.M. Stokes, and A.J. Wilson

80 Longitudinal Response of Pulmonary Function to Bronchodilators in Cystic Fibrosis
Edward N. Pattishall

86 Peak Expiratory Flow Measured With the Mini Wright Peak Flow Meter in Children
José Sanz, Antonio Martorell, Rosa Saiz, Vicente Alvarez, and José I. Carrasco

91 Infants With Upper Respiratory Illnesses Have Significant Reductions in Maximal Expiratory Flow
Fernando D. Martinez, Lynn M. Taussig, and Wayne J. Morgan

96 Neonatal Pulmonary Oxygen Toxicity in the Rat and Lung Changes With Aging
Donald W. Thibeault, Sherry Mabry, and Mo Rezaiekhaligh

Therapeutic and Diagnostic Methods

109 Use of a Touch Sensitive Screen and Computer Assisted Image Analysis for Quantitation of Developmental Changes in Pulmonary Structure
Kiran S. Deoras, Marla R. Wolfson, Robert L. Searls, S. Robert Hilfer, Joel B. Sheffield, and Thomas H. Shaffer

Case Reports

119 Tracheal Agenesis: An Exceptional Cause of Neonatal Respiratory Distress
Bénédicte Brichard, Eric Smeets, Léon Withofs, Yves Gillerot, Oreste Battisti, Jean-Paul Langhendries, and Jean-Marie Bertrand

121 Management of Unilateral Pulmonary Cystic Emphysema With Selective Bronchial Intubation and High Frequency Jet Ventilation in Two Infants
Rosario N.S. Chua and Mervin C. Yoder

125 Respiratory Papillomas: Presentation Before Six Months
Bradley E. Chipps, F.L. Don McClurg, Jr., Ellen M. Freidman, and George L. Adams

131 **Correspondence**

132 **Selected Abstracts**

Volume 9 • Number 3 • 1990

135 **Perspectives**

Original Articles

136 What Are the Mechanisms Producing Increased Ventilation in Dead Space Studies in Neonates?
C.J. Upton, A.D. Milner, G.M. Stokes, and P.G.T. Carman

140 Glucocorticoid Receptor Concentrations in Human Lung at Different Growth Stages
A. Labbe, G. Grizard, P. Dechelotte, and E.J. Raynaud

146 Effects of Chest Physical Therapy on Lung Function in Children Recovering From Acute Severe Asthma
M. Innes Asher, Catherine Douglas, Margaret Airy, Deborah Andrews, and Adrian Trenholme

152 Pulmonary Vascular Damage and the Development of Cor Pulmonale Following Hyaline Membrane Disease
Alison A. Hislop and Sheila G. Haworth

162 A Comparison of Lung Lamellar Body Phospholipids From Premature and Term Infants: Is Sphingomyelin a Contaminant of Surfactant?
M.A. Neumann, E.J. McMurchie, and R.A. Gibson

166 Surfactant Protein-A in Bronchoalveolar Lavage Fluid From Neonates With RDS on Conventional and High-Frequency Oscillatory Ventilation
Jeffrey S. Gerdes, Soraya Abbasi, Karen Karp, William Hull, and Jeffrey A. Whitsett

170 Effect of Altering Smooth Muscle Tone on Maximal Expiratory Flows in Patients With Tracheomalacia
Howard B. Panitch, Esteban N. Keklikian, Raymond A. Motley, Marla R. Wolfson, and Daniel V. Schidlow

177 Aerosolized Budesonide in Asthmatic Infants: A Double Blind Study
H.P. Van Bever, L. Schuddinck, M. Wojciechowski, and W.J. Stevens

181 Corticosteroids Do Not Affect the Clinical or Physiological Status of Infants With Bronchiolitis
Chaim Springer, Ephraim Bar-Yishay, Kamal Uwayyed, Avraham Avital, Daphna Vilozni, and Simon Godfrey

186 **Book Review**

187 **Correspondence**

191 **Selected Abstracts**

195 **Pediatric Pulmonology News**

196 **Erratum**

Volume 9 • Number 4 • 1990

Guest Editorial

197 Gas Exchange in HMD—An Old Problem With No New Solutions?
W. Alan Hodson

Original Articles

199 Bronchial Reactivity and Sex Hormone: Study in a Turner's Population
M.P. Villa, F. Bernardi, M. Burnaccini, A. Tura, M. Martelli, L. Mazzanti, R. Bergamaschi, and E. Cacciari

206 Ventilation-Perfusion Abnormalities in the Preterm Infant With Hyaline Membrane Disease: A Two-Compartment Model of the Neonatal Lung
Ivan L. Hand, Eric K. Shepard, Alfred N. Krauss, and Peter A.M. Auld

214 Should TGV Be Measured From End-Inspiratory Occlusions Rather Than End-Expiratory Occlusions in Wheezy Infants?
Celia J. Lanteri, Joan M. Raven, and Peter D. Sly

220 Effect of Forced Expiration on Thoracic Gas Volume in Wheezy Infants
Celia J. Lanteri, Joan M. Raven, and Peter D. Sly

224 Varying Tracheal Cross-Sectional Area During Respiration in Infants and Children With Suspected Upper Airway Obstruction by Computed Cinetomography Scanning
Christopher J.L. Newth, Martin J. Lipton, Robert G. Gould, and Mark Stretton

233 External Intercostal Muscle Activity During Acute Hypoxia in the Kitten
Robert D. Guthrie, Kenneth W. Klesh, Terrence L. O'Day, and Jon F. Watchko

238 Measurements of Pulmonary Mechanics Prior to the Elective Extubation of Neonates
Michael J. Balsan, Judith G. Jones, Jon F. Watchko, and Robert D. Guthrie

244 Pulmonary Function Following Positive Pressure Ventilation Initiated Immediately After Birth in Infants With Respiratory Distress Syndrome
Carl Bose, Brian Wood, Gennie Bose, Deborah Donlon, and Mitchell Friedman

251 *Pneumocystis carinii* Pneumonia in Young Children With AIDS
Michael R. Bye, Larry J. Bernstein, Joy Glaser, and David Kleid

Diagnostic Methods

254 Evaluation of a Mainstream Capnometer and End-Tidal Carbon Dioxide Monitoring in Mechanically Ventilated Infants
Keith S. Meredith and Frank J. Monaco

260 **Book Reviews**

Conference Report

262 Ninth Conference on Apnea of Infancy, Annenberg Center for Health Sciences at Eisenhower, Rancho Mirage, California, January 24–26, 1991

275 **Addendum**

278 **Acknowledgments**

280 **Author Index to Volume 9**

282 **Subject Index to Volume 9**